

REMARKS/ARGUMENTS

Favorable reconsideration of this application, in light of the following discussion, is respectfully requested.

Claims 1-2, 4-9, 12-20, 23-30, and 33-40 are currently pending. No claim amendments are presented, thus no new matter has been added.

In the outstanding Office Action, Claims 1, 2, 4, 7, 12-14, 17, 20, 23-25, 28, 33-34, 37, and 40 were rejected under 35 U.S.C. §103(a) as being unpatentable over Sugar et al. (U.S. 7,194,237, hereafter “Sugar”) in view of Pautler et al. (U.S. Pub. No. 2003/0185309, hereafter “Pautler”) and Onggosanusi et al. (U.S. Pub. No. 2004/0076224, hereafter “Onggosanusi”). The examiner has allowed Claims 5, 6, 8, 9, 15-16, 18-19, 26-27, 29-30, 35, and 38-39.

Applicants thank the examiner for the indication of allowed claims.

With respect to the rejection of Claim 1 under 35 U.S.C. §103(a), Applicants respectfully traverse this ground of rejection. Claim 1 recites, *inter alia*,

said receiver comprising:...

a proper reception weight generating means for generating proper reception weights by using the condition of received power from the received power estimation unit, information of channel state from the channel information accumulation unit and the processed feedback information from the feedback-delay compensating means, wherein for the generation of the proper reception weights, the information of channel state from the channel information accumulation unit corresponds to a channel state estimated at a time when the transmission weights currently being used at the transmitter were calculated.

Applicants submit that Sugar, Pautler, and Onggosanusi fail to disclose or suggest at least these features.

With respect to the rejection of Claim 1, the examiner has relied on previously cited Sugar, Pautler, and Onggosanusi as disclosing the claimed features. Applicants note that the

Office Action mainly repeats the analysis used in the previous Office Action. Additionally, the examiner cites to Onggosanusi as disclosing “a proper reception weight generating means for generating proper reception weights by using the condition of received power from the received power estimation unit, information of channel state from the channel information accumulation unit and the processed feedback information from the feedback-delay compensating means, wherein for the generation of the proper reception weights, the information of channel state from the channel information accumulation unit corresponds to a channel state estimated at a time when the transmission weights currently being used at the transmitter were calculated.” (See Office Action, at bottom of page 6).

As previously presented, Onggosanusi is directed to multipath interference-resistant receivers for closed-loop transmit diversity in CDMA systems. Fig. 2b of Onggosanusi shows a transmitter 105 with multiple antennas 110 and a receiver 115 with multiple antennas 120. Onggosanusi describes that the receiver 115 may provide to the transmitter 105 information such as channel state information or even weighting factors that can be used by the transmitter 105 to adjust its transmission (see para. [0031]).

Applicants submit that the examiner has not actually shown where Onggosanusi describes a “proper reception weight generating means” **at the receiver** which uses a channel state estimated at a time when the transmission weights currently being used at the transmitter were calculated **for the generation of proper reception weights**, as is required by Claim 1. Applicants note that Claim 1 explicitly distinguishes between transmission weights generated at a transmitter and reception weights generated at the receiver. However, the Office Action does not specify any element of Onggosanusi which is interpreted as the claimed “proper reception weight generating means.” The examiner has merely stated that the channel information is obtained from a received signal **that has been weighted in the transmitter** prior to being sent to the receiver (see Office Action, at top of page 7). However, this

description relates to *a transmission weight* generated at the transmitter and does not have anything to do with *the generation of reception weights at the receiver*. Thus, the Office Action has not properly shown that Onggosanusi discloses an element at the receiver which can be interpreted as a “proper reception weight generating means.” Furthermore, Applicants submit that there is no element in the receiver of Onggosanusi which generates reception weights *by using a channel state estimated at a time when the transmission weights currently being used at the transmitter were calculated*.

Therefore, Applicants submit that the combination of Sugar, Pautler, or Onggosanusi fails to disclose or suggest “said receiver comprising...a proper reception weight generating means for generating proper reception weights by using the condition of received power from the received power estimation unit, information of channel state from the channel information accumulation unit and the processed feedback information from the feedback-delay compensating means, wherein for the generation of the proper reception weights, the information of channel state from the channel information accumulation unit corresponds to a channel state estimated at a time when the transmission weights currently being used at the transmitter were calculated,” as defined by Claim 1.

Therefore, Applicants respectfully submit that Claim 1 patentably distinguishes over Sugar, Pautler, and Onggosanusi, either alone or in proper combination.

Independent Claims 2, 12, 13, 23, and 33 recite features similar to those of Claim 1 discussed above. Therefore, Applicants respectfully submit that Claims 2, 12, 13, 23, and 33 (and all associated dependent claims) patentably distinguish over Sugar, Pautler, and Onggosanusi, either alone or in proper combination.

Consequently, in light of the above discussion, the outstanding grounds for rejection are believed to have been overcome. The present application is believed to be in condition for formal allowance. An early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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